

Advanced Research Projects Agency-Energy (ARPA-E)

DOE ARPA-E Electrical Energy Storage for Vehicles Workshop

November 3, 2009

L'Enfant Plaza Hotel 480 L'Enfant Plaza SW Washington, DC 20037

ARPA-E Host and Administration

David Danielson—ARPA-E Program Manager Dawson Cagle—ARPA-E/Booz Allen Hamilton SETA Support

> <u>Electrical Energy Storage for Vehicles Agenda</u> <u>Electrical Energy Storage for Vehicles Summary Report</u>

Speakers and Presentations

- 1. David Danielson, ARPA-E
 - "ARPA-E Background and Workshop Introduction"
- 2. Ted Miller, Ford Motor Company
 - "Electrical Energy Storage for Vehicles: Targets and Metrics"
- 3. David Howell, Department of Energy Office of Vehicle Technologies "U.S. Department of Energy Office of Vehicle Technologies: <u>Electrochemical Energy Storage"</u>

Breakout Sessions

During the workshop, participants broke into two sets of breakout sessions comprising four topical group discussions per breakout session. The first set of breakout sessions focused on exploring the limits of lithium-ion intercalation based batteries, advanced non-lithium based intercalation battery approaches, Li-metal batteries, Li-S batteries, and Li-air battery approaches, respectively. The second set of breakout session focused on non-lithium based metal-air batteries, liquid metal based batteries, novel battery architectures and manufacturing processes, and advanced battery components and packaging, respectively. Following the breakout sessions, each group made a short set of summary slides of what they discussed. The breakout session results are contained within the Electrical Energy Storage for Vehicles Summary Report.